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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,607

09/21/2006

Takeo Yajima

4724-0038WOUS

1929

35301

7590

04/22/2010

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EXAMINER

HILTON, ALBERT

ART UNIT

PAPER NUMBER

1716

MAIL DATE

DELIVERY MODE

04/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/593,607	Applicant(s) YAJIMA, TAKEO	
	Examiner Albert Hilton	Art Unit 1716	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 01 April 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: _____.
- Claim(s) objected to: _____.
- Claim(s) rejected: _____.
- Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Parviz Hassanzadeh/
Supervisory Patent Examiner, Art Unit 1716

/Albert Hilton/
Examiner, Art Unit 1716

Continuation of 11. does NOT place the application in condition for allowance because:

1. Applicant argues that the supply-side valve (18) and outflow-side valve (19) are separate and dispersed components disposed away from the pump, rather being disposed in a nozzle assembly. Yajima (Japanese Patent No. JP-11230048) states that the supply-side valve (18) and outflow-side valve (19) are placed along the supply-side flow path (14) and outflow-side flow path (16), respectively, but is silent as to the distance between these valves (18, 19) and the nozzle assembly (housing 10) (Yajima: paragraphs 13-14 and Fig. 1). Simply making the components of an apparatus integral to an assembly does not distinguish the integrated assembly over the prior art in a patentably distinct way (see MPEP 2144.04 V, "making integral"). Absent any express teaching in Yajima to avoid placing the components in an integrated assembly, one of ordinary skill in the art at the time of the invention would have found it a prima facie design choice obvious to integrate the supply and outflow valves into a main assembly.
2. Applicant further argues that Kawata (US Patent No. 4932353) does not explain how a heat exchanger might be successfully incorporated into the pump of Yajima. In response to this argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case, Kawata teaches the advantages of providing a heat exchanger along the entire flow path of the dispensed chemical (Kawata: col 3, lines 28-31).
3. Applicant argues that the addition of the heat exchanger of Kawata to the apparatus of Yajima would render Yajima's pump inoperable for its intended purpose. It is not clear to the examiner why the pump of Yajima would not function as intended within a heat exchanger. As noted in the previous office action (paragraph 17), the same design principle is used in Skidmore (US Patent No. 3738409), which teaches a pump (pump 21) placed within a heat exchanger (jacket 61) (Skidmore: col 3, lines 12-15 and Figs. 2-3).
4. Applicant argues that Kawata does not define where the "source" of chemical in the apparatus of Kawata is located or the "transport path" of the liquid, and that one of ordinary skill in the art would have placed the double tube of Kawata from the pump assembly to the nozzle. The examiner asserts that one of ordinary skill in the art would have understood the "source" of chemical to correspond to the tank (tank 15) of Yajima and the transport path to correspond to the path from said tank (15) to the nozzle (nozzle 17). Said artisan would also appreciate that leaving a section of the chemical flow path without a heat exchanger would adversely allow the ambient temperature to affect the temperature of the dispensed liquid.
5. Applicant further argues that Kawata teaches a triple tube rather than a double tube. The examiner asserts that the triple tube of Kawata comprises a double tube, and would still meet the limitations required by claim 9. .